UNITED STATES DISTRICT COURT

DISTRICT OF MINNESOTA

ELLIOT KAPLAN and JEANNE KAPLAN, Plaintiffs, v. MAYO CLINIC, MAYO FOUNDATION, MAYO FOUNDATION FOR MEDICAL EDUCATION AND RESEARCH, MAYO ROCHESTER, INC., MAYO CLINIC ROCHESTER, INC., and LAWRENCE J. BURGART, Defendants.	Civil No. 07-3630 (JRT/JJK) **FINDINGS OF FACT, CONCLUSIONS OF LAW AND ORDER FOR JUDGMENT**

William D. Harper, Paul D. Peterson, and Lori L. Barton, **HARPER & PETERSON, PLLC,** 3040 Woodbury Drive, Woodbury, MN 55129, for plaintiffs.

William R. Stoeri, Heather M. McCann, and Andrew B. Brantingham, **DORSEY & WHITNEY LLP**, 50 South Sixth Street, Suite 1500, Minneapolis, MN 55402, for defendants.

Plaintiffs Elliot and Jeanne Kaplan ("Plaintiffs" or "the Kaplans") filed this action in 2007 against Mayo Clinic and its affiliated entities (collectively, "Mayo Clinic"), Dr. David Nagorney ("Dr. Nagorney"), and Dr. Lawrence J. Burgart ("Dr. Burgart"). In 2003, Elliot Kaplan was diagnosed with Grade 2 of 4 pancreatic cancer and underwent a Whipple procedure at Mayo Clinic to remove the head of his pancreas and surrounding tissues. Biopsies taken after the Whipple procedure determined that Elliot Kaplan had

never had cancer, and the diagnosis had been based on a false positive biopsy of a benign pancreatic tumor.

The case proceeded to trial against Mayo Clinic and Mayo Clinic pathologist Dr. Burgart on claims for breach of contract and negligent failure to diagnose.[1] The Court granted judgment as a matter of law against the Kaplans on their breach of contract claim, and the jury returned a verdict against the Kaplans on their tort claim. The Kaplans appealed, and the Eighth Circuit reversed as to the Court's grant of judgment as a matter of law on the breach of contract claim. The Eighth Circuit issued a narrow remand solely for further proceedings on breach of contract.

This case is now before the Court for a second trial based on the Eighth Circuit's remand. The Court conducted a trial, without a jury, on the merits of the breach of contract claim on February 2, 3, 5, and 6, 2015. Having considered each party's evidence, exhibits, and arguments of counsel, the Court enters the following Findings of Fact, Conclusions of Law, and Order for Judgment, pursuant to Rule 52(a)(1) of the Federal Rules of Civil Procedure.

FINDINGS OF FACT[2]

1. All of the Findings of Fact set forth herein are undisputed or have been proved by a preponderance of the evidence.

[1] The Court granted summary judgment in favor of Dr. Nagorney on October 27, 2008. (Mem. Op. & Order on Defs.' Mot. for Summ. J., Oct. 27, 2008, Docket No. 87.)

[2] During the four-day trial, the parties presented evidence on myriad aspects of Elliot Kaplan's history and health. The Court will include in its Findings of Fact only those facts relevant to determining the merits of the Kaplans' breach of contract claim.

2. To the extent the Court's Conclusions of Law include what may be considered Findings of Fact, they are incorporated herein by reference.

I. PLAINTIFFS

3. In 2003, at the time of the surgery at issue in this case, Plaintiff Elliot Kaplan ("Elliot") was a partner at Daniels & Kaplan PC in Kansas City. (Tr. 62:22-63:23.)[3] Daniels & Kaplan consulted for several car companies, including Chrysler, Volkswagen of America, and BMW. (Tr. 63:12-23.)

4. Elliot and his wife of thirty-seven years, Plaintiff Jeanne Kaplan ("Jeanne"), live on a ten-acre ranch in Stilwell, Kansas. (Tr. 57:17-22, 246:5-6, 248:3-249:19.)

5. In 2003, Jeanne was running a horse training and riding lesson operation at the Kaplans' ranch. (Tr. 246:9-13, 246:22-247:24.)

II. PROCEDURAL HISTORY

6. This case is before the Court for a second trial, on remand from the Eighth Circuit. The only remaining claim is the Kaplans' breach of contract claim.

7. The first trial was held before a jury in April 2009. At that trial, the Kaplans asserted a breach of contract by Mayo Clinic, based on Dr. Nagorney's alleged promise to confirm via intraoperative biopsy the existence of cancer prior to surgery, which he did not fulfill. The Defendants moved for judgment as a matter of law on the

[3] All citations to "Tr." refer to the transcript of the trial that took place between February 2, 2015 and February 6, 2015. (Tr. of Trial, Mar. 23, 2015, Docket Nos. 382-85.)

breach of contract claim at the close of the Kaplans' case-in-chief, and the Court granted that motion. (April 14, 2009 Ct. Mins. for Trial Before Judge John R. Tunheim ("April 14 Mins."), Apr. 14, 2009, Docket No. 165.)

8. The remainder of the testimony at the first trial focused on the Kaplans' allegation that Dr. Burgart negligently misdiagnosed Elliott with pancreatic cancer, leading to an unnecessary surgery. The jury returned a "not liable" verdict for Dr. Burgart on April 14, 2009. (Special Verdict Form, Apr. 15, 2009, Docket No. 166.)

9. The Kaplans moved for a new trial on April 30, 2009. (Pls.' Mot. for New Trial, Apr. 30, 2009, Docket No. 170.) The Court denied the motion. (Mem. Op. & Order Denying Pls.' Mot. for New Trial, Apr. 20, 2010, Docket No. 184.)

10. The Kaplans appealed the jury verdict. (Notice of Appeal, May 15, 2009, Docket No. 178.) On September 2, 2011, the Eighth Circuit affirmed the judgment in favor of Dr. Burgart and reversed the judgment as a matter of law as to the Kaplans' breach of contract claim, remanding for further proceedings on the breach of contract issue. *Kaplan v. Mayo Clinic*, 653 F.3d 720, 729 (8th Cir. 2011).

11. The parties agreed to waive a jury for the second trial.

12. In February 2013, Mayo Clinic brought a motion in limine to limit damages testimony at the second trial on the breach of contract claim. (Defs.' Mot. in Limine, Feb. 1, 2013, Docket No. 269.) The motion sought to (1) preclude evidence of the Kaplans' extracontractual damages, such as emotional distress and pain and suffering; (2) dismiss Jeanne Kaplan's loss of consortium claim; and (3) preclude the Kaplans from

presenting evidence of damages not produced prior to the Magistrate Judge's December 30, 2012 deadline. (*Id.* at 1.)

13. The Court granted Mayo Clinic's first two requests and denied the third. (Mem. Op. & Order on Defs.' Mots. in Limine, May 28, 2013, Docket No. 310.) The Court concluded that contract action damages are limited to "those capable of measurement by 'some definite rule or standard of compensation,' and 'to the actual pecuniary loss naturally and necessarily flowing from the breach.'" (*Id.* at 15 (quoting *Beaulieu v. Great N. Ry. Co.*, 114 N.W. 353, 356 (Minn. 1907)).)

14. The Court held a second trial, without a jury, on the Kaplans' breach of contract action between February 2 and February 6, 2015. After the close of their case-in-chief, the Kaplans moved to amend the pleadings to include a claim for medical battery. (Mot. for Leave to Amend Compl. to Add a Claim for Battery, Feb. 3, 2015, Docket No. 371.) The Court denied the Kaplans' motion on April 10, 2015. (Mem. Op. & Order Denying Mot. to Amend Compl., Apr. 10, 2015, Docket No. 386.)

III. ELLIOT KAPLAN'S MEDICAL HISTORY IN MISSOURI

15. In July 2003, after eating a crab dinner, Elliot experienced abdominal pain lasting more than a week. (Tr. 65:10-11, 298:3-10; Defs.' Ex. 2 at 200036.)[4]

16. On July 28, 2003, Elliot consulted with his treating internist, Dr. John Dunlap. (Tr. 298:3-4.) At the appointment with Dr. Dunlap, Elliot had abdominal

[4] When citing to "Defs.' Ex." or "Pls.' Ex.", the Court is referring to the exhibits offered by each party that the Court admitted during the bench trial.

tenderness, an elevated white blood cell count, a conservative bowel, and abdominal infection. (Tr. 298:7-10.)

17. Elliot was then hospitalized at Menorah Medical Center ("Menorah") in Missouri from July 28, 2003 to August 1, 2003, to discover the source of his symptoms. (Tr. 65:5-20; Defs.' Ex. 6 at 202611-202613.)

18. At Menorah, Elliot underwent several tests and one surgery. Specifically, he had surgery to repair a small incisional hernia. (Tr. 65:18-20, 251:1-6, 524:8-12; Defs.' Ex. 1 at 100007; Defs.' Ex. 6 at 202611.) He also had a CT scan of his abdomen and pelvis, as well as a needle biopsy of his pancreas. (Tr. 65:17-20, 298:10-12, 299:2-6; Defs.' Ex. 6.)

19. The results of Elliot's CT scan were interpreted by multiple pathologists affiliated with Menorah. (Defs.' Ex. 6 at 202612.) The scan showed a three to four centimeter mass in the head of Elliot's pancreas. (Tr. 299:2-4; Defs.' Ex. 1 at 100017; Defs.' Ex. 6 at 202612.)

20. The Missouri pathologists interpreted Elliot's pathology report, including the needle biopsy results, as showing pancreatic cancer, otherwise known as adenocarcinoma. (Tr. 299:8-14, 316:129-24; Defs.' Ex. 1 at 100199; Defs.' Ex. 6 at 202612.)

21. The Missouri doctors expressed certainty about the cancer diagnosis and recommended treatment at Mayo Clinic. (Tr. 103:22-104:9.)

22. On August 3, 2003, Dr. Dunlap went to the Kaplans' residence to inform Elliot of the diagnosis. (Tr. 65:21-24, 316:19-24, 317:10-13.) Based on Elliot's

discussion with Dr. Dunlap, the Kaplans believed that Elliot had cancer. (Tr. 66:6-10, 260:11-262:7.)

IV. PANCREATIC CANCER

23. Pancreatic cancer is a particularly aggressive form of cancer that can prove deadly in a matter of weeks. (Tr. 69:6-8, 263:1-7, 386:3-6.)

24. Adenocarcinoma may be diagnosed clinically or pathologically. (Tr. 501:24-502:16.)

25. A pathologic diagnosis or pathology proven diagnosis is based on positive biopsy results. (Tr. 391:6-16.) A clinical diagnosis is made in the absence of a positive biopsy, based on a patient's symptoms, history, and imaging studies if available. (Tr. 502:8-10, 505:6-12.)

26. Pancreatic adenocarcinoma symptoms include pain, jaundice, diarrhea, weight loss, obstruction of the gastrointestinal tract, and inability to eat full meals. (Tr. 393:13-17.)

27. Patients in the early stages of pancreatic cancer often experience pain but it is intermittent and not constant pain. (Tr. 393:1-10.)

28. Elliot Kaplan's diagnosis was a pathologic diagnosis, because it took into account his pain but was based largely on a positive biopsy result. (Tr. 502:11-13.)

29. Cancer of the pancreas can quickly advance too far for surgery to remain a viable treatment option. (Tr. 69:8-9, 317:21-318:2.)

30. If treatment remains an option, the treatment for pancreatic cancer is to perform a Whipple surgery. (Tr. 69:2-20, 387:6-16, 494:13-18.)

31. A Whipple procedure, or pancreaticoduodenectomy, is a surgery in which the head of the pancreas is removed. (Tr. 236:24-237:15.) It may also involve the removal – or resection – of the duodenum, gall bladder, distal common bile duct, and antrum. (237:14-15.)

V. PREPARING FOR AUGUST 2003 APPOINTMENT AT MAYO CLINIC

32. Dr. Dunlap and Elliot agreed that Elliot should travel to Mayo Clinic for Whipple surgery. (Tr. 66:6-10.)

33. Elliot went to Mayo Clinic not for a second opinion but for cancer treatment, including surgery. (Tr. 83:1-4, 128:8-10, 260:7-10, 264:16-265:3.)

34. In August 2003, following his meeting with the Kaplans, Dr. Dunlap referred Elliot to Dr. David Nagorney. (Tr. 83:5-9, 316:25-317:6.)

35. Dr. Nagorney is a biliary general surgeon at Mayo Clinic. (Tr. 485:14-15.) He has written numerous articles and book chapters on pancreatic surgery and the Whipple procedure. (Tr. 486:23-487:9; Defs.' Ex. 11 at 22-59.) He has performed approximately 400 Whipple procedures. (Tr. 487:20-23.)

36. After meeting with Dr. Dunlap, Elliot believed he had cancer. He understood that he was going to Mayo Clinic for cancer treatment, including surgery. (Tr. 66:6-10, 93:18-19, 127:17-22.)

37. When Dr. Dunlap referred Elliot to Dr. Nagorney, Elliot sent his pathology reports to his father, Dr. Marvin Kaplan, a cardiologist. (Tr. 57:25-58:15, 66:11-12, 67:13.) Dr. Kaplan expressed concerns about the diagnosis based on the potential for inaccuracy in needle biopsies and lack of family cancer history. (Tr. 67:2-12.)

38. On August 5, 2003, Elliot Kaplan sent Dr. Nagorney a letter that had been drafted by Dr. Kaplan, expressing that he was "struck by the weakness of the diagnostic statement as well as the history previously mentioned." (Defs.' Ex. 1 at 100206-07; Tr. 67:19-68:2.)

39. In preparation for Elliot's appointment, Dr. Nagorney requested that the Missouri doctors forward their records to Mayo Clinic for review by Mayo Clinic's pathology department. (Tr. 488:15-24.)

40. Dr. Burgart, a pathologist at Mayo Clinic, reviewed the Missouri pathology specimens in Elliot's case. (Tr. 455:15-456:9.) Based on his review of the pathology material, which included several slides from multiple levels of the Missouri needle biopsy, (Tr. 456:17-457:1), Dr. Burgart concluded that Elliot had Infiltrating Grade 2 of 4 adenocarcinoma, (Tr. 458:13-15). His report reflected that he had no equivocations about his diagnosis. (Tr. 459:8-17.)

41. Dr. Thomas C. Smyrk, another pathologist at Mayo Clinic, conducted an additional independent examination of the same pathology materials and reached the same diagnosis. (Tr. 459:18-460:4; Defs.' Ex. 1 at 100007.)

VI. PREOPERATIVE MEETING BETWEEN DR. NAGORNEY AND THE KAPLANS AT MAYO CLINIC

42. The Kaplans met with Dr. Nagorney at Mayo Clinic on August 11, 2003. (Defs.' Ex. 1 at 100017-18.)

43. By the time the Kaplans arrived at Mayo Clinic, Elliot was no longer experiencing the same pain he had felt prior to his hospitalization in Missouri. (Tr. 524:8-16.)

44. At the meeting, Dr. Nagorney informed the Kaplans that Elliot had a very aggressive form of cancer and recommended that Elliot undergo a Whipple procedure as soon as possible. (Defs.' Ex. 1 at 100017-18; Tr. 69:2-9, 494:13-18.)

45. Elliot then requested that the surgery be delayed three days so that his children could arrive before it took place. (Tr. 69:10-13, 69:21-23.) He also raised his father's concerns about the diagnosis, especially because he did not have clinical signs of cancer. (69:23-25.)

46. Dr. Nagorney was unequivocal about Elliot's cancer diagnosis. He told the Kaplans that Dr. Burgart was one of the best pathologists in the world and that if Dr. Burgart said Elliot had cancer, then Elliot had cancer. (Tr. 70:1-9.) He then explained the Whipple procedure to the Kaplans. (Tr. 494:19-495:8.)

47. Part of Dr. Nagorney's explanation was to inform the Kaplans that certain decisions would need to be made once Elliot was on the operating table. He discussed that the first thing he would do would be to look for additional tumors and take biopsies of any suspicious areas surrounding the tumor to check whether the cancer had spread to

other organs, beyond the scope of what can be removed in a Whipple procedure. (Tr. 495:9-497:1.)

48. Dr. Nagorney told the Kaplans that if the cancer had spread too far, he would terminate the surgery and send Elliot home, because it would already be too late to treat his cancer. (Tr. 70:9-23, 495:14-19.)

49. Dr. Nagorney explained to the Kaplans that if the cancer had not already spread too far, he would conduct an intraoperative ultrasound of Elliot's liver to make sure that the cancer had not spread deep into Elliot's liver. (Tr. 497:2-15.) Only if the cancer had not spread would Dr. Nagorney perform the Whipple surgery. (Tr. 497:12-22.)

50. Dr. Nagorney told the Kaplans that if the cancer had not spread, he would continue with the Whipple procedure to remove the mass in the head of Elliot's pancreas. (Tr. 497:14-22.)

51. Dr. Nagorney also informed the Kaplans that he would take additional biopsies during Elliot's surgery. (Tr. 495:9-12.)

52. The additional biopsies taken during surgery would be of the tissue at the edges of the resected mass. (Tr. 464:19-466:7, 497:23-498:2.) The purpose of these biopsies was to confirm that the margins around the resection were cancer-free, indicating that additional resection would be unnecessary. (Tr. 497:23-498:10.)

53. Frozen section biopsies to check the "margins" of removed tissue is a standard practice during Whipple procedures. (Tr. 464:19-465:1.)

54. Dr. Nagorney maintains that he did not promise the Kaplans he would biopsy the pancreas before proceeding with the Whipple surgery to confirm the cancer diagnosis. (Tr. 240:4-11.)

55. Elliot's version of the conversation consistently matches Dr. Nagorney's up until this last point. Elliot's memory of the discussion was that Dr. Nagorney promised to take additional biopsies before performing the Whipple surgery to verify the presence of cancer. (Tr. 117:21-118:3.) If the biopsy was negative, Elliot understood that Dr. Nagorney would not continue with the Whipple surgery but would instead close Elliot up and follow his case. (Tr. 70:24-71:2, 120:17-19.)

56. More specifically, Elliot recalls Dr. Nagorney presenting three possibilities: first, if the cancer was too advanced and had spread too far, they would close him up and send him home; second, if Elliot had cancer and it could be removed surgically, they would perform the Whipple surgery; and third, if Elliot did not have cancer, they would close him up and send him home. (Tr. 70:17-71:2.)

57. Jeanne's recollection of the conversation is more fully in keeping with Dr. Nagorney's account. She did not expect that Mayo Clinic would take any steps to confirm the cancer diagnosis before proceeding with the Whipple surgery. (Tr. 266:2-267:21, 269:25-270:6.)

58. Jeanne remembers that Dr. Nagorney promised to check whether the cancer had spread too far before proceeding with the Whipple surgery, and the only contingency he presented for the procedure was that, if Elliot's cancer had already spread too far, he would not perform the surgery. (Tr. 273:2-15.)

59. Jeanne does not recall any specific promise by Dr. Nagorney to do a biopsy of the mass before the Whipple procedure and, if he found no cancer, to close Elliot up and not do the surgery. (Tr. 273:22-274:1, 276:23-278:4.)

60. Dr. Nagorney testified that if the Kaplans had asked him to do an intraoperative biopsy of the pancreas before the Whipple procedure and not to proceed if it was negative, he would have made a note of it. (Tr. 499:23-500:5.)

61. The Kaplans did not ask Dr. Nagorney to take an intraoperative biopsy to confirm the presence of cancer before performing the Whipple surgery. (Tr. 110:8-111:3, 499:23-500:5.)

VII. ELLIOT KAPLAN'S WHIPPLE SURGERY

62. Dr. Nagorney performed Elliot's surgery on August 14, 2003. (Defs.' Ex. 1 at 100007-09.)

63. At the beginning of Elliot's surgery, Dr. Nagorney inspected Elliot's diaphragm, small and large intestine, spleen, kidneys, bile duct, liver surfaces, and abdomen for cancer. (Tr. 507:11-15; Defs.' Ex. 1 at 100008.)

64. After conducting a visual inspection, Dr. Nagorney excised two firm nodules and one slightly enlarged lymph node. (Tr. 507:16-508:19.) Pathology confirmed that they were negative for cancer. (Tr. 508:3-4; Defs.' Ex. 1 at 100007-09.)

65. Dr. Nagorney also performed an intraoperative ultrasound, which indicated no signs that the cancer had spread to Elliot's liver. (Tr. 508:20-25.)

66. With a negative visual inspection, ultrasound, and surrounding tissue biopsies, Dr. Nagorney continued with the Whipple procedure. (Tr. 509:1-4.)

67. During the Whipple procedure, Dr. Nagorney removed the head of Elliot's pancreas, as well as a portion of his jejunum, his distal bile duct, and his distal common bile duct. (Defs.' Ex. 1 at 100008.) Because Elliot had previously had his gall bladder removed, Dr. Nagorney did not need to remove it during the Whipple surgery. (Defs.' Ex. 1 at 100008.)

68. After Dr. Nagorney had removed the mass in the pancreas and surrounding tissues, he sent biopsies of the margin tissues to the pathology department. (Defs.' Ex. 1 at 100007, 100009.) Pathology confirmed that the margins were negative and that Dr. Nagorney could finish the Whipple procedure at that point, without removing any additional tissue. (Defs.' Ex. 1 at 100007.)

69. The resected mass from Elliot's pancreas offered pathologists the first chance to examine the global cellular architecture of the mass and surrounding tissues. (Tr. 461:3-14.)

70. When Dr. Burgart and other pathologists at Mayo Clinic examined the resected tissue in Elliot's case, they found no global changes in the tumor indicative of cancer. (Tr. 460:19-25.) Accordingly, they diagnosed Elliot's tumor as benign. (Tr. 461:1-2.)

71. Elliot never had pancreatic cancer. (Tr. 209:4-6.)

72. Elliot was diagnosed after the surgery with acute and early chronic pancreatitis. (Tr. 509:21-24.)

73. Dr. Nagorney met with the Kaplans after Elliot's surgery and explained that Elliot had never had cancer; the Missouri biopsy was a false positive. (Tr. 509:6-11.)

74. During these postoperative discussions, the Kaplans never asked Dr. Nagorney why he did not do an intraoperative biopsy of the pancreas first to confirm the presence of cancer, before proceeding with the surgery. (Tr. 509:12-20.)

75. Elliot suffered complications as a result of the Whipple surgery that continue to affect his health. (Tr. 73:17-74:8, 130:3-131:15, 133:3-20.)

VIII. NEEDLE BIOPSIES

A. Limitations of Needle Biopsies

76. Needle biopsies are thin cores of tissue, approximately the width and shape of a pencil lead or an uncooked stick of spaghetti. (Tr. 457:2-6.) Needle biopsy specimens involve a very small amount of tissue. (Tr. 459:21-23.)

77. Because needle biopsies produce such a small amount of tissue, pathologists can identify atypical cytology and distortions in cell architecture, but they are unable to see the global architecture of the tissue's cells without a larger tissue sample. (Tr. 460:14-461:20.)

78. Needle biopsies can be processed for examination in two ways: permanent section and frozen section.

79. Permanent sections are created from the biopsies by dehydrating them in an overnight process and embedding paraffin wax in and around the tissues. (Tr. 457:7-17.) The paraffin block is then cut into very thin sections – 5 microns thick – and stained with

special dyes to enable pathologists to accurately assess the tissue under a microscope. (Tr. 457:14-23.) The process can take between four and twelve hours to complete. (Tr. 463:2-8.) Because of the length, permanent section biopsies are used before or after surgeries, but not for results needed during surgery.

80. For intraoperative biopsies, where the results are needed more quickly than a permanent biopsy would allow, pathologists use the frozen section process. (Tr. 462:19-22, 463:9-15.)

81. The frozen section process typically takes ten to twenty minutes. (Tr. 463:14-15.) Greater speed is achieved by replacing the dehydration process with freezing to harden the tissue. (Tr. 463:9-12.)

82. Frozen section is not as precise as permanent section. (Tr. 462:25-463:23.) The water in the tissue expands during the freezing process, leaving ice crystal artifact in the tissue sample. (Tr. 463:19-23.)

83. Because a needle biopsy – whether permanent or frozen section – takes such a narrow tissue sample, it is possible to miss the cancer when inserting the needle into the tissue to obtain a sample. (Tr. 467:6-11.) This is particularly true for pancreatic adenocarcinoma, which produces tumors with significant amounts of benign tissue mixed with the cancer cells. (Tr. 467:2-11.)

84. With pancreatic adenocarcinoma, approximately one in ten negative biopsies turns out to in fact be cancer; in other words, the false negative rate for adenocarcinoma is 10 percent. (Tr. 468:7-19.)

85. One reason the false negative rate is so high is that even cancerous tumors contain benign cells, and the surgeon could miss the cancer cells when the needle is inserted into the tumor. (Tr. 396:3-18, 467:2-11.)

86. False positive needle biopsies are an extremely rare event. (Tr. 468:19-23, 499:18-22.) Dr. Burgart estimated that, based on his experience, a false positive occurs only once in every 1,000 needle biopsies, or even less frequently. (Tr. 468:19-23.)

87. Throughout their careers, neither Dr. Nagorney nor Dr. Burgart has experienced a false positive needle biopsy other than the one in Elliot's case. (Tr. 461:21-462:7, 499:18-22.)

88. Despite the rarity of false positive needle biopsies, the surgeons who testified during the trial agreed that a repeat biopsy taken from the same tumor that produced the first false positive could well have yielded a second false positive. (Tr. 221:23-222:15, 425:9-24, 466:18-20, 469:20-24.)

B. Intraoperative Needle Biopsies and Whipple Procedures

89. If a patient has a pathologic diagnosis of cancer from a positive preoperative needle biopsy, it is possible as a practical matter, but not standard procedure, to perform an intraoperative biopsy once the patient is in surgery to confirm the presence of cancer. (Tr. 228:9-11, 466:8-23.)

90. Dr. Nagorney had performed such intraoperative needle biopsies in years prior to 2003 for patients with a clinical diagnosis of cancer, but not for a biopsy proven cancer patient. (Tr. 225:16-24.)

91. Dr. Nagorney testified that performing a repeat needle biopsy once Elliot was in surgery to confirm the presence of cancer would go against his practices throughout his entire career for patients with biopsy proven cancer. (Tr. 241:25-242:3, 242:17-20.)

92. Dr. Keith Lillemoe is the Surgeon-in-Chief and the Chief of the Department of Surgery at Massachusetts General Hospital, as well as a professor of surgery at Harvard Medical School. (Defs.' Ex. 10 at 1; Tr. 383:6-12.) He agreed that if a patient had a positive permanent section preoperative biopsy, he would not do a repeat intraoperative biopsy. (Tr. 398:14-16.)

93. Dr. Lillemoe explained that if he were presented with a positive permanent section preoperative biopsy and a negative intraoperative frozen section biopsy, he would totally disregard the latter. (Tr. 398:14-19.)

94. Likewise, Dr. Burgart testified that he has never seen an intraoperative needle biopsy performed where the doctors already had a positive permanent section needle biopsy. (Tr. 466:8-20, 467:22-468:1.)

95. The reason a surgeon would not perform an intraoperative biopsy when the patient already had a positive permanent section is twofold. First, frozen section biopsies are less precise than permanent section biopsies. (Tr. 462:25-463:23, 482:3-13.) Second, because of the extraordinarily low false positive biopsy rate and relatively higher false negative biopsy rate, a positive needle biopsy would trump a negative one. (Tr. 320:12-321:2, 396:3-398:24, 401:20-402:2, 467:13-19.)

96. The risk for a surgeon in stopping a surgery based on a negative intraoperative needle biopsy is that, if the biopsy were a false negative, the surgeon would leave behind an extremely deadly and aggressive form of cancer. (Tr. 69:6-8, 263:1-7, 386:3-6, 399:4-25.)

97. If a surgeon had doubts about a diagnosis – Dr. Nagorney has testified he did not in this case, based on the Mayo Clinic pathologists' report – an intraoperative biopsy would be done by endoscopic ultrasound ("EUS"), not by a needle biopsy which can risk spreading the tumor. (Tr. 415:10-416:12, 500:6-501:11.)

98. To the extent the Kaplans – especially Elliot – recall Dr. Nagorney promising to do an intraoperative biopsy to first check whether Elliot had cancer and not to perform the Whipple if the biopsy was negative, the Court does not find their testimony to be credible. The Kaplans surely believe the promise was made, but it is likely they misunderstood the discussion. First, every physician who testified in this case was consistent: in light of the high false negative rate for biopsies and the extreme rarity of false positives, it would have been illogical to perform an intraoperative biopsy to confirm the presence of cancer when Elliot already had a positive permanent section biopsy. Even if Dr. Nagorney had taken such a biopsy, the physicians were again consistent about what they expected it to show. An intraoperative biopsy of the pancreatic mass could likely show the same thing as the preoperative biopsy, or, if the intraoperative biopsy were negative, it would not trump the positive preoperative biopsy because frozen section is less precise and there is a high likelihood that the needle simply missed the cancer, creating a false negative biopsy. In other words, a negative

intraoperative biopsy would not have caused Dr. Nagorney to terminate the surgery without performing the Whipple procedure.

99. Given these facts, the Court finds it highly unlikely that Dr. Nagorney would have promised to perform such an intraoperative biopsy when he met with the Kaplans before the surgery. Instead, having heard each witness's account of the meeting, the Court finds that it is much more likely that Dr. Nagorney promised to perform intraoperative biopsies to determine **how** – not whether – to proceed with the Whipple procedure based on whether the cancer had spread before the resection and whether the margins were clean after resection. The Court finds that Elliot likely heard this explanation and misunderstood the point in time at which these intraoperative biopsies would take place. Dr. Nagorney's explanation of what he told the Kaplans – that he would first perform biopsies of the surrounding tissue to determine whether the cancer had spread and then perform intraoperative biopsies of the margins to determine whether they were clean, closing Elliot up if so – is corroborated by Jeanne Kaplan's testimony and her notes from the meeting with Dr. Nagorney. It is also fully consistent with Elliot's testimony about the three options Dr. Nagorney gave him for how the surgery would proceed, except in one respect. Elliot's recollection is that Dr. Nagorney would take the biopsies **before** the Whipple procedure and close Elliot up if they were negative, rather than that he would take the biopsies **after** the resection and proceed with closing Elliot up at that point if they were negative. The Court finds that it is plausible Elliot simply did not understand the timeline described by Dr. Nagorney, and to the extent Elliot maintains

that Dr. Nagorney was more definitive about performing the biopsy before continuing with the surgery, such testimony is not credible.

100. Further, the Court finds that Elliot's testimony about the process of confirming the cancer diagnosis is not consistent with Dr. Nagorney's reassurance that Dr. Burgart was one of the best pathologists in the world and that if he said Elliot had cancer, then Elliot had cancer. The Court acknowledges that Elliot had concerns about the diagnosis when he arrived at Mayo Clinic. However, the Court finds that it is substantially more likely that Dr. Nagorney attempted to assuage these concerns through his statements about Dr. Burgart's skill rather than by promising to challenge the unequivocal diagnosis of a highly regarded pathologist by using a less precise, intraoperative frozen section biopsy carrying a high false negative rate. Thus, the Court finds Dr. Nagorney's version of the meeting to be the most credible.

CONCLUSIONS OF LAW

I. STANDARD OF REVIEW

As the Eighth Circuit explained after the first trial in this case, "[t]o make out a claim for breach of contract, the plaintiffs had to show the formation of the contract, the defendants' breach, and resulting damages." *Kaplan*, 653 F.3d at 726 (citing *Briggs Transp. Co. v. Ranzenberger*, 217 N.W.2d 198, 200 (1974), and *Costello v. Johnson*, 121 N.W.2d 70, 74 (1963)). In this particular case, the Eighth Circuit elaborated that for the Kaplans to prevail on a breach of contract claim, they would need to show that: (1) Dr. Nagorney made a "definitive agreement" on behalf of Mayo Clinic that he would

perform an intraoperative biopsy to confirm the cancer diagnosis before proceeding with the Whipple surgery; (2) Dr. Nagorney failed to perform an intraoperative biopsy to confirm the cancer diagnosis; (3) had Dr. Nagorney performed an intraoperative biopsy, it would have been negative for cancer; (4) had the intraoperative biopsy been negative for cancer, Dr. Nagorney would not have proceeded with the Whipple surgery; and (5) proceeding with the Whipple surgery caused economic damages to the Kaplans. *Id.* at 727-28.

II. BREACH OF CONTRACT CLAIM

A. Contract Formation

To prevail on their breach of contract claim, the Kaplans must first prove the formation of a contract. Under Minnesota law, "the test of contractual formation is an objective one, to be judged by the words and actions of the parties and not by their subjective mental intent." *Hill v. Okay Constr. Co.*, 252 N.W.2d 107, 114 (Minn. 1977). "Mutual assent entails a 'meeting of the minds concerning [a contract's] essential elements.'" *SCI Minn. Funeral Servs., Inc. v. Washburn-McReavy Funeral Corp.*, 795 N.W.2d 855, 864 (Minn. 2011) (quoting *Minneapolis Cablesystems v. City of Minneapolis*, 299 N.W.2d 121, 122 (Minn. 1980)).

The Kaplans' amended complaint broadly alleges that the agreement Mayo Clinic made was to be "exhaustive and precise" in the pathology diagnosis. (Am. Compl. ¶¶ 75-77, Sept. 17, 2007, Docket No. 4.) The Kaplans ultimately narrowed the scope of this allegation to a promise by Dr. Nagorney to perform an intraoperative biopsy and not to

proceed with the Whipple procedure if the biopsy were negative. Based on the Court's finding that Elliot Kaplan likely misunderstood Dr. Nagorney's explanation of when intraoperative biopsies would take place, the Court concludes that there was no "meeting of the minds" as to the alleged intraoperative biopsy promise in this case. The Court concludes that Dr. Nagorney most likely explained a standard Whipple procedure, which would involve the use of intraoperative biopsies but only after tissue had been resected, to determine whether the margins were clean or if further surgery was needed. Elliot Kaplan, on the other hand, appears to have believed that Dr. Nagorney would perform those intraoperative biopsies **before** the resection. These positions reflect a lack of mutual assent on the essence of the alleged promise.

The Court concludes that, more likely than not, the objective words used by Dr. Nagorney to describe the Whipple surgery did not constitute an offer to perform an intraoperative biopsy to verify the cancer diagnosis before continuing with the Whipple procedure. Elliot may well have placed great importance on his belief that such an intraoperative biopsy would be done and assented to the Whipple procedure only with the understanding that Dr. Nagorney would confirm the diagnosis through an intraoperative biopsy before proceeding. Even if that was his subjective intent, however, the objective manifestation of his assent did not reflect that understanding, and it is this objective manifestation with which the Court is concerned. *Hill*, 252 N.W.2d at 114. Elliot did not ask Dr. Nagorney to perform an intraoperative biopsy to confirm the existence of cancer before proceeding. After Dr. Nagorney told Elliot that Dr. Burgart was a top pathologist and that if he said Elliot had cancer, then it was cancer, there is no indication Elliot

expressed additional interest in a repeat intraoperative biopsy or that he insisted Dr. Nagorney verify Dr. Burgart's conclusion during the surgery. Rather, Dr. Nagorney explained the surgical process, and the Court concludes that it is highly unlikely that in doing so he promised to perform a biopsy that the physicians at trial uniformly rejected as illogical. Based upon Dr. Nagorney's explanation, Elliot Kaplan agreed to undergo the procedure described, and three days later, the surgery took place. That conversation reflected many promises by Dr. Nagorney: to abandon the surgery if the cancer had already spread too far, to intraoperatively biopsy the margins of the resected tissue, and to continue the surgery until the margins were clean. Importantly, because Dr. Nagorney did not objectively offer to first verify the diagnosis via intraoperative biopsy, Elliot could not have accepted such an offer.

Given that there was no mutual assent to perform an intraoperative biopsy before proceeding with the Whipple surgery, the Court concludes that no contract was formed in this case to perform an intraoperative biopsy to confirm the diagnosis of pancreatic cancer. Therefore, the Kaplans' breach of contract claim fails, as there was no contract for Dr. Nagorney to breach.

B. Breach of Contract

If the Kaplans had proved that they formed a contract with Mayo Clinic to perform an intraoperative biopsy to confirm the cancer diagnosis before proceeding with surgery, they would also have demonstrated that that contract was breached. It is undisputed that Dr. Nagorney did not perform an intraoperative needle biopsy or frozen section biopsy to

confirm the existence of pancreatic cancer before proceeding with the Whipple surgery. Dr. Nagorney did take biopsies of margin tissues during the surgery, and consistent with the fact that Elliot did not have cancer, those biopsies were negative when examined postoperatively. He did not perform a biopsy to confirm the diagnosis before continuing with the procedure, as the Kaplans allege Dr. Nagorney promised to do. Therefore, if there had been a contract, the Kaplans would have met their burden as to the element of breach. Because the Court concludes that no contract was formed, however, the Court finds that there was no wrongdoing on Dr. Nagorney's part in not performing an intraoperative biopsy to confirm the diagnosis.

C. Damages

Finally, even if the Kaplans had demonstrated both the formation of a contract and a breach of the formed contract, they would also need to establish damages. As the Court explained when ruling on the motion in limine as to contractual damages evidence in this case, the purpose of damages in a breach of contract action is to put the nonbreaching party "in the position in which he would be if the contract were performed." *Lesmeister v. Dilly*, 330 N.W.2d 95, 102 (Minn. 1983). Recoverable damages are those "which arose naturally from the breach or could reasonably be supposed to have been contemplated by the parties when making the contract as the probable result of the breach." *Id.* at 103. Accordingly, "[l]iability for breach of contract requires proof that damages resulted from or were caused by the breach." *Border State Bank of Greenbush v. Bagley Livestock Exch., Inc.*, 690 N.W.2d 326, 336 (Minn. Ct. App. 2004).

In this case, the Eighth Circuit explained that "[t]o prove damages, the plaintiffs would first have had to offer evidence to support a finding that the intraoperative biopsy results would have been negative for cancer." *Kaplan*, 653 F.3d at 728. The Court concludes that this is a close call, but that the Kaplans have shown that an intraoperative biopsy would likely have been negative because Elliot Kaplan did not have pancreatic cancer. It is not, of course, a certainty that such a biopsy would have been negative; as Dr. Nagorney observed, Elliot's biopsy at Menorah was a false positive, so it is possible that an intraoperative biopsy could also have yielded a false "repeat positive diagnosis." (Tr. 221:12-222:15.) Although Dr. Nagorney testified that there is no way to know whether the result would be negative or another false positive, this uncertainty does not defeat the Kaplans' claim on this issue. *See Daubert v. Merrell Dow Pharm., Inc.*, 509 U.S. 579, 590 (1993) (concluding, in the context of a motion to exclude expert testimony under Federal Rule of Evidence 702, that "it would be unreasonable to conclude that the subject of scientific testimony must be 'known' to a certainty; arguably, there are no certainties in science"). Dr. Lillemoe explained that a second false positive could not be ruled out, and Dr. Burgart anticipated that a repeat biopsy taken from the same mass could likely indicate the same cellular changes causing the positive diagnosis in the first biopsy.

The possibility of a second false positive notwithstanding, it is undisputed that Elliot Kaplan did not have cancer and that false positive biopsies are extremely rare. Given these facts, and the additional fact that all biopsies taken during Elliot's surgery were later determined to be negative, the Court concludes that the Kaplans have proven

by a preponderance of the evidence that an intraoperative biopsy to confirm the diagnosis would also have been negative. Although there is a chance that a repeat biopsy would have been negative, there is not sufficient evidence to suggest that a second biopsy, taken intraoperatively, would more likely than not have been a repeat false positive result.

To successfully prove damages, the Kaplans would also have had "to establish that Dr. Nagorney would not have performed the Whipple procedure if the promised biopsy was negative." *Id.* Based on the testimony and evidence presented at trial, the Court concludes that the Kaplans failed to meet their burden on this point. Even if Dr. Nagorney had performed an intraoperative biopsy and it was negative for cancer, the Kaplans have provided no evidence – aside from Dr. Nagorney's alleged promise – that Dr. Nagorney would have abandoned the Whipple procedure. Indeed, the evidence was entirely to the contrary. Dr. Nagorney was unequivocal that he would not have allowed a negative intraoperative biopsy to trump Dr. Burgart's diagnosis based on the positive permanent section biopsy. Drs. Lillemoe and Burgart agreed that they would have disregarded a negative intraoperative frozen section biopsy if they had a positive permanent section biopsy before the surgery. Because of the uniform opinion that a positive permanent section biopsy would trump a negative intraoperative biopsy, the Court concludes that Dr. Nagorney would have proceeded with the Whipple surgery even if he obtained an intraoperative biopsy that proved negative.

Because the Court concludes that Dr. Nagorney did not promise to perform an intraoperative biopsy to confirm the presence of cancer and would have performed the Whipple surgery even if he had taken an intraoperative biopsy that proved to be negative,

the Court concludes that the Kaplans are not entitled to damages in this case. The Court recognizes that this is a truly unfortunate situation, as Elliot Kaplan underwent a surgery that ultimately was not necessary, and his quality of life has been diminished in the wake of that surgery. Despite the unfortunate nature of these circumstances, he may not recover damages from Mayo Clinic on his breach of contract claim.

ORDER

Based on the foregoing, and all the files, records, and proceedings herein, **IT IS HEREBY ORDERED** that judgment be entered in favor of defendants and against plaintiffs on plaintiffs' breach of contract claim.

LET JUDGMENT BE ENTERED ACCORDINGLY.

DATED: August 14, 2015
at Minneapolis, Minnesota.

s/ John R. Tunheim

JOHN R. TUNHEIM
Chief Judge
United States District Court